



PRODUCT SPECIFICATION OF Oupiin

PRODUCT SPECIFICATION

產品規格書

產品名稱 Description	產品料號 Part No.	圖號 Drawing No.
SFP/SFP+ Cage	8951-1PP01A	8951-D0000-010
	8951-1SS01A	8951-D0000-009
	8951-1PS01A	8951-D0000-013

PRODUCT NAME (產品名稱)	DOCUMENT No.: 文件編號	Rev. 版本	OUPIIN
SFP/SFP+ Cage (ROHS)	8951spec-1	C2 (I658)	歐品電子
	Approved 核准	Checked 審核	Prepared 制作
	Q.A. Section Chief	Jack Hsing	2020.06.03



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1. SCOPE 適用範圍

This product specification defines the product performance and the test methods to ascertain the performance of the SFP/SFP+ Cage , which is designed and manufactured by Oupiin Electronic Co., Ltd. This product specification is applicable but not only for those part numbers which be shown in the cover page.

本產品規格書規定了由歐品電子有限公司設計生產的 SFP/SFP+ 型籠子產品的特性及測試方法。本產品規格書適用於但不局限於封面所顯示的產品料號。

2. REFERENCE DOCUMENTS 參考文件

MIL-STD-1344	Test method for electrical connector 電子連接器測試方法
MIL-STD-202	Test method for electrical components 電子零件測試方法
EIA364	Test method for electrical components 電子零件測試方法
JIS C 0051	Test method for electrical components 電子零件測試方法
QQ-N-290A	Specification for nickel plating 鍍鎳規格
MIL-P-81728A	Specification for tin/lead plating 鍍錫鉛規格
MIL-T-10727B	Specification for tin plating 鍍錫規格
UL1977	UL standard for safety of attachment plug and receptacle UL安規要求標準

3. FEATURE & DIMENSIONS 特徵及尺寸

3.1. PRODUCT DIMENSION 產品尺寸

These connectors shall have the dimensions as shown in drawing.

3.2. PCB/PANEL LAYOUT 印刷電路板佈局

The recommended PCB layout is shown in drawing.

本產品適用的 PCB layout 參見圖面。

3.3. BILL OF MATERIAL 材料清單

Harmful material controlling follows the requirements of RoHS. The bill of material is described in drawing.

有害物質控制符合RoHS指令要求。本產品使用的材料參見圖面。

3.4. MECHANICAL & ELECTRICAL CHARACTERISTIC 機械及電氣特性

The connector shall have the mechanical and electrical performance as described in drawing.

本產品的機械及電氣特性參見圖面。



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3.5. PACKAGING 包裝

Products shall be packaged according to requirements specified in purchase order for safe delivery, connector container and the packaging method are shown in package specification.

產品可依客戶指定要求包裝，包裝材料與包裝方式參見產品包裝規範。

3.6. STORAGE AND OPERATING TEMPERATURE 儲存與使用溫度

Temperature range: $-55^{\circ}\text{C}\sim+105^{\circ}\text{C}$, including terminal temperature rise for rating current.

Storage Temperature : $0^{\circ}\text{C}\sim+40^{\circ}\text{C}$, Humidity: 80%RH under 。

溫度範圍： $-55^{\circ}\text{C}\sim+105^{\circ}\text{C}$,包含接觸端子的額定電流溫升。

儲存溫度： $0^{\circ}\text{C}\sim+40^{\circ}\text{C}$ ，濕度：80%RH以下。

4. Environmental 環境要求

4.1. SOLDERABILITY 可焊性

Connectors meet solder-ability to MIL-STD-202, and shall be free of contaminants.

產品可焊性符合MIL-STD-202標準規定的相關要求，表面不得有污染物。

4.2. RESISTANCE TO SOLDER HEAT 耐焊接熱

4.1. WAVE SOLDER 波峰焊接

Each cycle consists of three consecutive phases. as shown in Table II.

每個焊接週期包括三個連續的階段，見附表二。

Note: 說明

Device temperature measurements are referenced from the top-center of the package outer surface.

設備溫度量測時以從頂部中間位置測量為準。



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5. PERFORMANCE AND TEST DESCRIPTION 性能及測試

5.1. REQUIREMENT 要求

Product is designed to meet electrical, mechanical, and environmental performance requirements specified in Table I.

本產品設計符合附表一所列的機械，電氣及環境要求。

5.2. TEST CONDITION 測試條件

Unless otherwise specified, all tests shall be performed at ambient environmental conditions.

除非特別注明，所有測試在室溫條件下完成。

5.3. SAMPLE SELECTION 樣品選擇

Test samples shall be selected at random from current production. No test samples shall be reused. Samples are pre-conditioned with 10cycles of durability. Each group shall be containing 5 test samples at least.

測試樣品從現生產的產品中隨機抽取，所有測試過的樣品不得重複使用。樣品已預先插拔10次，每組測試至少有5個樣品。



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Table I: Test Requirements and Methods

附表一：測試要求與方法

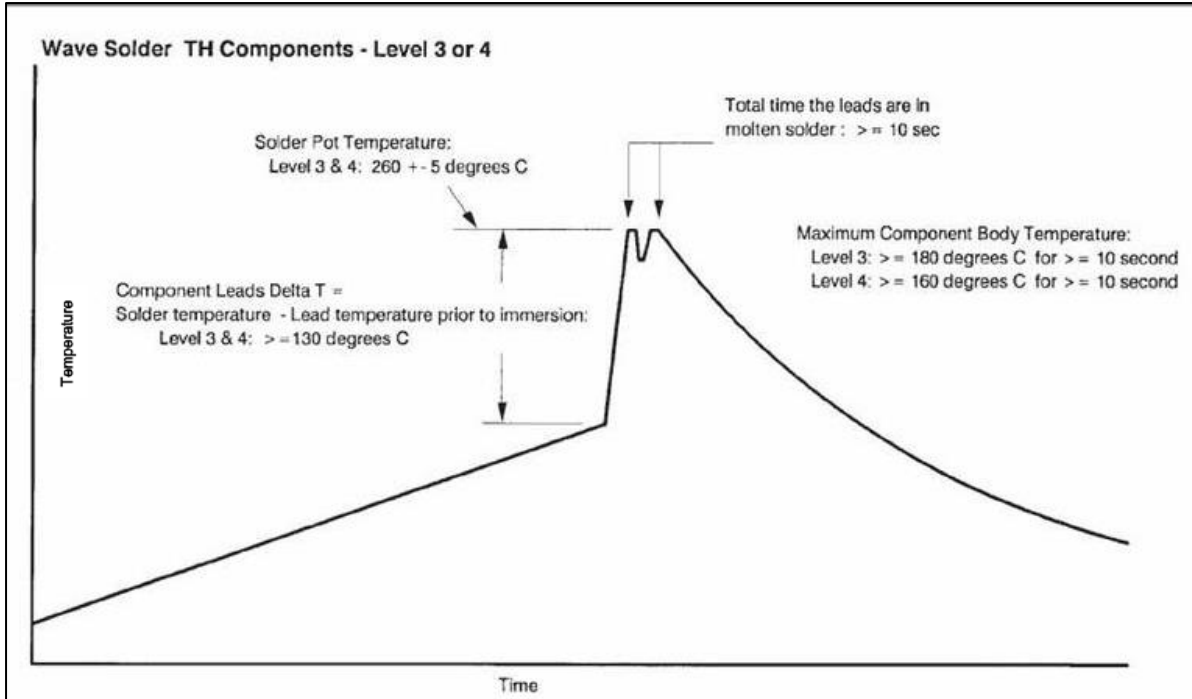
Items 項目	Requirements 要求	Test Methods 測試方法
1. Confirmation of Product 產品確認	Product shall be conforming to the requirements of applicable product drawing. 產品必須符合相關產品圖面的要求。	Visually, dimensions and functionally inspected per applicable product drawing. 依相關產品圖面，檢查產品的外觀、尺寸及功能。
2. Mating /Un-mating Force 插入力/拔出力	Mating force:18N Max. Un-mating force:12.5N Max 插入力最大:18N. 拔出力最大:12.5N Max	At a speed of 25.4±3 mm/minute, apply axial insert the mating part into fully or pull out from the subject product. 以 25.4±3 mm/分鐘的速度，軸向完全插入對配插件到被測產品中或從被測產品中拔出。
3. Cage latch strength/module retention. 屏蔽樞鎖力	90 N minimum. (樞鎖力):90N 最小。	Load cable module into cage/connector assembly applied to PCB with attached bezel. Apply specified axial load to engaged module at a maximum rate of 6.35mm [.25 in] per minute and hold for 1 minute to verify module retention and cage latch strength. 線材組件(公端)插入到壓接在 PCB 板上的母端屏蔽殼中。在公端組件方向(與 cable 方向一致)上，以 ≤6.35mm/分鐘 的速度持續一分鐘(拔出)來驗證公端組件與母端樞鎖力
4. Salt Spray 鹽霧	After testing, no damage. 測試後產品無損壞。	5±1% salt concentration 48 hours 35±2°C 鹽水濃度 5±1%，時間 48 小時，溫度 35±2°C。
	Per MIL-STD-202, Method 101, condition B 適用：MIL-STD-202，方法 101，條件 B。	
5. Solderability 可焊性	There shall have a solder coverage of 95% minimum。 產品在測試完成後，焊接部位粘錫面積大於 95%。	Soldering time: 4 to 6 seconds. Temperature: 260±5°C. 焊接時間：4~6 秒。 溫度：260±5°C。



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Table II : Weld the curve graph in crest

附表二：波峰焊曲線圖





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Material EMI Spring : Copper Alloy (Phosphor Bronze C5210)

[SGS Test Report Click here](#)

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REPORT OF MATERIAL TEST 材料測試報告

ISO 9001
ISO/TS 16949
IECQ QC080000
ISO 14001
OHSAS 18001 & TOSHMS

No.: 251197

DATE: MAY.21, 2013

Customer 顧客名稱 : 名佳利金屬工業股份有限公司
Commodity 商品名稱 : C5210R PHOSPHOR BRONZE FOR SPRING (EH)
Applied Standard 引用標準 : CNS 9503 Phosphor Bronze Sheets, Plates and Strips

Manufacture No.	銅捲製號	24M007A	
(Specification)	產品規格	Standard	
Thickness (mm)	產品厚度		0.300
Width (mm)	產品寬度		622.000
Length (mm)	產品長度		
(Chemical Analysis Test)	化性測試		
P(%)	磷	0.030 - 0.350	0.128
Sn(%)	錫	7.000 - 9.000	7.938
Cu+Sn+P(%)	銅錫磷	min. 99.700	99.942
(Mechanical & Physical Test)	物性測試		
Thickness Test (mm)	厚度測試	-	0.292
Width Test (mm)	寬度測試	-0.10 +0.00	600D
Tensile Strength (kgf/mm2)	抗拉強度	min. 65.00	72.26
Elongation (%)	伸長率	min. 10.00	23.54
Hardness Test (Hv)	硬度	200.0 - 230.0	224.0 - 226.0
Grain Size (mm)	結晶粒度	-	0.010
Electric Conductivity (%)	導電率	-	12.10
(Other Information)	其他資訊		
Delivery No.	出貨單號		



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QA Supervisor: 周建偉

A980301 S1800901ME



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Material Cage : Copper Alloy (C7521)

[SGS Test Report Click here](#)

[如需 SGS 測試報告請點選此處](#)

产品质量证明书		QUALITY CERTIFICATE		编号: BG/JD-04-008					
客户/Customers:		件数/Quantity:	2						
合金牌号/Alloys:	C 7521 R	净重/Net. Wt:	1301.5						
批号/lotch No:	M17061204-20	发货日期/Delivery Date:	2020-5-20						
规格/Size:	0.25*380	生产日期/Date of Production:	2020.05.14						
状态/State:	H	产品标准/Standard:	JIS H 3110:2012						
物理性能指标 Main Parameter									
检测项目	单位	客户要求		实测值					
		Min	Max						
抗拉强度/Tensile Strength	N/mm ²			517					
屈服强度/Yield Strength	N/mm ²								
延伸率/Elongation	%			17					
维氏硬度/Hardness	HV			165					
表面粗糙度/Surface Roughness	um								
厚度公差/Thickness Tolerance	mm	0.24	0.25	0.247					
宽度公差/Width Tolerance	mm								
晶粒度/Grain Size	um								
导电率/Conductivity	%IACS								
弯曲试验/Bending Test	弯曲角度 (°)								
	弯曲半径 (R/T)								
化学成分 Chemical Composition (%)									
元素	Cu	Sn	Zn	Ni	Fe	Pb	P	Mn	
标准	Min	92			16.5				
	Max	96			19.5	0.25	0.03	0.5	
实测值	64.35	/	remained	16.8	0.12	0.0035	0.0012	0.15	
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